



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

03/23/2009

Richard J. Minnich, Esq.  
Fay, Sharpe, Fagan, Minnich & McKee, LLP  
Seventh Floor  
1100 Superior Avenue  
Cleveland, OH 44114-2518

EXAMINER

ALIA, CURTIS A

ART UNIT

PAPER NUMBER

2416

DATE MAILED: 03/23/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,086	10/28/2003	Bryan A. Lauer	LAUER 2 LUTZ 2 00242	4158

TITLE OF INVENTION: DECISION TREE LOGIC FOR DETERMINING THE OPTIMAL VALUE FOR QOS UPLINK AND DOWNLINK MAXIMUM  
BITRATE ATTRIBUTES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** Mail **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
 or Fax **(571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 03/23/2009

Richard J. Minnich, Esq.  
 Fay, Sharpe, Fagan, Minnich & McKee, LLP  
 Seventh Floor  
 1100 Superior Avenue  
 Cleveland, OH 44114-2518

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/695,086

10/28/2003

Bryan A. Lauer

LAUER 2 LUTZ 2 00242

4158

**TITLE OF INVENTION:** DECISION TREE LOGIC FOR DETERMINING THE OPTIMAL VALUE FOR QOS UPLINK AND DOWNLINK MAXIMUM BITRATE ATTRIBUTES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
-------------	--------------	---------------	---------------------	----------------------	------------------	----------

nonprovisional

NO

\$1510

\$300

\$0

\$1810

06/23/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
----------	----------	----------------

ALIA, CURTIS A

2416

370-235000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number** is required.

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

1

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

2

3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/695,086

10/28/2003

Bryan A. Lauer

LAUER 2 LUTZ 2 00242

4158

7590

03/23/2009

EXAMINER

ALLIA, CURTIS A

ART UNIT

PAPER NUMBER

2416

DATE MAILED: 03/23/2009

Richard J. Minnich, Esq.  
Fay, Sharpe, Fagan, Minnich & McKee, LLP  
Seventh Floor  
1100 Superior Avenue  
Cleveland, OH 44114-2518

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 852 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 852 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability****Application No.**

10/695,086

**Applicant(s)**

LAUER, BRYAN A.

**Examiner**

Curtis A. Alia

**Art Unit**

2416

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment submitted 11 December 2008.
2. ☒ The allowed claim(s) is/are 1-24 and 26-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Aung S. Moe/  
Supervisory Patent Examiner, Art Unit 2416

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment filed 11 December 2008 has been entered. Claim 25 has been noted as being cancelled for the record. Claims 1-24 and 26-29 are still pending in this application with claims 1, 6, 16, 17 and 26 being independent.

### ***Examiner's Amendment***

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas Tillander (Registration No. 26166) on 9 March 2009.

The application has been amended as follows:

1. (Previously Presented) A method for a network element to respond to a maximum bitrate request of user equipment of a subscriber, the method comprising:  
receiving a requested maximum bitrate attribute value; determining if a maximum bitrate limit of the subscriber is equal to or greater than a value of a lowest valued member of a set of available maximum bitrate values;  
offering to provide requested communication services in association with an offered maximum bitrate, if the maximum bitrate limit of the subscriber is equal to or greater than the value of the lowest valued member of the set of available maximum bitrate values, the offered maximum bitrate value being equal to a value of a member of an allowable subset of the set of available maximum bitrate values, the allowable subset consisting of members of the set of available maximum bitrates that have values less than or equal to the maximum bitrate limit, and the offered maximum bitrate being equal to a value of a member of the allowable subset that is

Art Unit: 2416

greater than or equal to, the lower of the requested maximum bitrate value and the maximum bitrate limit, or has the highest value of the subset; and

declining the requested communications service if the maximum bitrate limit of the subscriber is not equal to or greater than the value of lowest valued member of the set of available maximum bitrate values.

2. (Currently Amended) The method of claim 1 wherein offering to provide the requested communication services in association with the offered maximum bitrate value comprises:

setting a temporary working value equal to a lowest value selected from among the requested maximum bitrate attribute value and the maximum bitrate limit;

determining whether the temporary working value is equal to a value of a member of the allowable subset of the set of available maximum bitrate values, higher than the values of all the members of the allowable subset of the set of available maximum bitrate values, between a next higher valued member and a next lower valued member of the allowable subset of the set of available maximum bitrate values, or lower than the values of all the members in the set of available maximum bitrate values;

setting the offered maximum bitrate value equal to the temporary working value if the temporary working value is equal to the value of a member of the allowable subset of the set of available maximum bitrate values; and

offering to provide the requested communications services in association with the offered maximum bitrate value.

3. (Currently Amended) The method of claim 1 wherein offering to provide the requested communication services in association with the offered maximum bitrate value comprises:

setting a temporary working value equal to a lowest value selected from among the requested maximum bitrate attribute value and the maximum bitrate limit;

determining whether the temporary working value is equal to a value of a member of the allowable subset of the set of available maximum bitrate values, higher than the values of all the members of the allowable subset of the set of available maximum bitrate values, between a next higher valued member and a next lower valued member of the allowable subset of the set of available maximum bitrate values, or lower than the values of all the members in the set of available maximum bitrate values;

setting the offered maximum bitrate value equal to a value of the highest valued member of the allowable subset of the set of available maximum bitrate values if the temporary working value is higher than the values of members of the allowable subset of the set of available maximum bitrate values; and

offering to provide the requested communications services at the offered maximum bitrate value.

4. (Currently Amended) The method of claim 1 wherein offering to provide the requested communication services in association with the offered maximum bitrate value comprises:

setting a temporary working value equal to a lowest value selected from among the requested maximum bitrate attribute value and the maximum bitrate limit;

determining whether the temporary working value is equal to a value of a member of the allowable subset of the set of available maximum bitrate values, higher than the values of all the members of the allowable subset of the set of available maximum bitrate values, between a next higher valued member and a next lower valued member of the allowable subset of the set of available maximum bitrate values, or lower than the values of all the members in the set of available maximum bitrate values;

setting the offered maximum bitrate value equal to a value of a lowest valued member of the allowable subset of the set of available maximum bitrate values if the temporary working value is lower than all the values of members of the set of available maximum bitrate values; and

offering to provide the requested communications services at the offered maximum bitrate value.

5. (Previously Presented) The method of claim 1 wherein offering to provide the requested communication services in association with the offered maximum bitrate value comprises:

setting a temporary working value equal to a lowest value selected from among the requested maximum bitrate attribute value and the maximum bitrate limit;

determining whether the temporary working value is equal to a value of a member of the allowable subset of the set of available maximum bitrate values, higher than the values of all the members of the allowable subset of the set of available maximum bitrate values, between a next higher valued member and a next lower valued member of the allowable subset of the set of available maximum bitrate values, or lower than the values of all the members in the set of available maximum bitrate values;

setting the offered maximum bitrate value equal to a value of the next higher valued member of the allowable subset of the set of available maximum bitrate values if the temporary working value is between the next higher and the next lower valued members of the allowable subset of the set of available maximum bitrate values and the next higher valued member is less than or equal to the maximum bitrate limit; and

setting the offered maximum bitrate value equal to a value of the next lower member of the allowable subset of the set of available maximum bitrate values if the temporary working value is between the next higher and the next lower valued members and the next higher member is greater than the maximum bitrate limit.

6. (Previously Presented) A method for a network element to respond to a maximum bitrate request of user equipment of a subscriber, the method comprising:

receiving a requested maximum bitrate attribute value;

determining if a lowest network element supported maximum bitrate value is equal to or less than a maximum bitrate limit associated with the subscriber and if the lowest network element supported maximum bitrate value is equal to or less than the maximum bitrate limit associated with the subscriber;

determining a temporary working value from among the requested maximum bitrate attribute value and the maximum bitrate limit;

determining whether the temporary working value is a network element supported value, above all network element supported values, below all network element supported values or between two network element supported values; and

offering a value in response to the maximum bitrate request based on the determination of whether the temporary working value is above all network element supported values, below all network element supported values or between two network element supported values.

7. (Original) The method of claim 6 wherein offering the value in response to the maximum bitrate request based on the determination of whether the temporary working value is above all network element supported values, below all network element supported values or between two network element supported values comprises:

offering the temporary working value in response to the maximum bitrate request if the temporary working value is a network element supported value.

8. (Original) The method of claim 6 wherein offering the value in response to the maximum bitrate request based on the determination of whether the temporary working value is above all network element supported values, below all network element supported values or between two network element supported values comprises:

offering a highest network element supported value in response to the maximum bitrate request if the temporary working value is above all network element supported values.

9. (Previously Presented) The method of claim 6 wherein offering the value in response to the maximum bitrate request based on the determination of whether the temporary working value is above all network element supported values, below all network element supported values or between two network element supported values comprises:

offering a lowest network element supported value in response to the maximum bitrate request if the temporary working value is below all network element supported values.

10. (Currently Amended) The method of claim 6 wherein offering the value in response to the maximum bitrate request based on the determination of whether the temporary working value is above all network element supported values, below all network element supported values or between two network element supported values comprises:

offering a next higher network element supported value if the temporary working value is between ~~[[a]]~~ the next higher and a next lower network element supported value and the next higher network element supported value is less than or equal to the maximum bitrate limit; and

offering the next lower network element supported value if the temporary working value is between the next higher and the next lower network element supported values and the next higher network element supported value is greater than the maximum bitrate limit.

11. (Currently Amended) The method of claim 6 wherein offering the value in response to the maximum bitrate request based on the determination of whether the temporary working value is above all network element supported values, below all network element supported values or between two network element supported values comprises:

offering a next higher network element supported value if the temporary working value is between ~~[[a]]~~ the next higher and a next lower network element supported value and the next higher network element supported value is less than or equal to the maximum bitrate limit.



12. (Currently Amended) The method of claim 6 wherein offering the value in response to the maximum bitrate request based on the determination of whether the temporary working value is above all network element supported values, below all network element supported values or between two network element supported values comprises:

offering a next lower network element supported value if the temporary working value is between a next higher and ~~[[a]] the~~ next lower network element supported value and the next higher network element supported value is greater than the maximum bitrate limit.

13. (Currently Amended) The method of claim 6 wherein determining if the lowest network element supported maximum bitrate value is below ~~[[a]] the~~ maximum bitrate limit associated with the subscriber comprises:

determining if an SGSN supported maximum bitrate value is below ~~[[a]] the~~ maximum bitrate limit associated with the subscriber.

14. (Currently Amended) The method of claim 6 wherein determining if the lowest network element supported maximum bitrate value is below ~~[[a]] the~~ maximum bitrate limit associated with the subscriber comprises:

determining if a GGSN supported maximum bitrate value is below ~~[[a]] the~~ maximum bitrate limit associated with the subscriber.

15. (Currently Amended) The method of claim 6 wherein determining if the lowest network element supported maximum bitrate value is below ~~[[a]] the~~ maximum bitrate limit associated with the subscriber comprises:

determining if an RNC supported maximum bitrate value is below ~~[[a]] the~~ maximum bitrate limit associated with the subscriber.

16. (Previously Presented) A method for a network element to respond to a maximum bitrate request of user equipment of a subscriber, the method comprising:

receiving a requested maximum bitrate attribute value;

determining if a lowest network element supported maximum bitrate value is equal to or less than a maximum bitrate limit associated with the subscriber and if the lowest network element supported maximum bitrate value is equal to or less than the maximum bitrate limit associated with the subscriber;

determining a temporary working value from among the requested maximum bitrate attribute value and the maximum bitrate limit;

determining if the temporary working value is a network element supported value, above all network element supported values, below all network element supported values or between two network element supported values;

offering the temporary working value in response to the maximum bitrate request if the temporary working value is a network element supported value;

offering a highest network element supported value in response to the maximum bitrate request if the temporary working value is above all network element supported values;

offering a lowest supported value in response to the maximum bitrate request if the temporary working value is below all network element supported values;  
offering a next higher network element supported value if the temporary working value is between the next higher and a next lower network element supported value and the next higher network element supported value is less than or equal to the maximum bitrate limit; and  
offering the next lower network element supported value if the temporary working value is between the next higher and the next lower network element supported value and the next highest network element supported value is greater than the maximum bitrate limit.

17. (Previously Presented) A network element operative to respond to a maximum bitrate request of user equipment of a subscriber, the network element comprising:  
means for receiving a requested maximum bitrate attribute value; and means for determining if a maximum bitrate limit of the subscriber is equal to or greater than a value of a lowest valued member of a set of available maximum bitrate values;  
means for offering to provide communication services in association with a maximum bitrate value selected from a subset of the set of available maximum bitrate values, if the maximum bitrate limit of the subscriber is equal to or greater than the value of the lowest valued member of the set of available maximum bitrate values, the subset including only those elements of the set of maximum bitrate values that are equal to or less than the maximum bitrate limit of the subscriber, the selected value being equal to the value of the subset element that is greater than or equal to, the lower of the requested maximum bitrate value and the maximum bitrate limit, or has the highest value of the subset.

18. (Currently Amended) The network element of claim 17 wherein the means for offering to provide communication services in association with ~~[[a]]~~ the maximum bitrate value selected from ~~[[a]]~~ the subset of the set of maximum ~~available~~ bitrate values comprises:  
means for determining a temporary working value from among the requested maximum bitrate attribute value and the maximum bitrate limit;  
means for determining whether the temporary working value is a network element supported value, above all network element supported values, below all network element supported values or between two network element supported values; and  
means for offering to provide communication services in association with ~~[[a]]~~ the temporary working value if the temporary working value is a network element supported value.

19. (Currently Amended) The network element of claim 17 wherein the means for offering to provide communication services in association with ~~[[a]]~~ the maximum bitrate value selected from ~~[[a]]~~ the subset of the set of maximum bitrate values comprises:  
means for determining a temporary working value from among the requested maximum bitrate attribute value and the maximum bitrate limit;  
means for determining whether the temporary working value is a network element supported value, above all network element supported values, below all network element supported values or between two network element supported values; and

means for offering to provide the communication services in association with a highest network element supported value if the temporary working value is above all network element supported values.

20. (Currently Amended) The network element of claim 17 wherein the means for offering to provide communication services in association with [[a]] the maximum bitrate value selected from [[a]] the subset of the set of maximum bitrate values comprises:

means for determining a temporary working value from among the requested maximum bitrate attribute value and the maximum bitrate limit;

means for determining whether the temporary working value is a network element supported value, above all network element supported values, below all network element supported values or between two network element supported values; and

means for offering to provide the communication services in association with a lowest supported value if the temporary working value is below all network element supported values.

21. (Currently Amended) The network element of claim 17 wherein the means for offering to provide communication services in association with [[a]] the maximum bitrate value selected from [[a]] the subset of the set of maximum bitrate values comprises:

means for determining a temporary working value from among the requested maximum bitrate attribute value and the maximum bitrate limit;

means for determining whether the temporary working value is a network element supported value, above all network element supported values, below all network element supported values or between two network element supported values; ~~and~~

means for offering to provide communication services in association with a next higher network element supported value if the temporary working value is between [[a]] the next higher and a next lowest network element supported value and the next higher network element supported value is less than or equal to the maximum bitrate limit; and

means for offering to provide communication services in association with the next lower network element supported value if the temporary working value is between the next higher and the next lower network element supported values and the next higher network element supported value is greater than the maximum bitrate limit.

22. (Original) The network element of claim 17 wherein the network element comprises an SGSN.

23. (Original) The network element of claim 17 wherein the network element comprises a GGSN.

24. (Original) The network element of claim 17 wherein the network element comprises an RNC.

25. (Canceled)

26. (Original) A network element operative to respond to a maximum bitrate request of user equipment of a subscriber, the network element comprising:
- a network interface operative to receive a requested maximum bitrate attribute value directly or indirectly from the user equipment of the subscriber;
  - a first comparator operative to determine if a lowest network element supported maximum bitrate value is equal to or less than a maximum bitrate limit associated with the subscriber;
  - a second comparator operative to determine a temporary working value equal to the lowest value selected from among of the requested maximum bitrate attribute value and the maximum bitrate limit;
  - a bitrate value classifier operative to determining if the temporary working value is a network element supported value, above all network element supported values, below all network element supported values or between two network element supported values;
  - a bitrate offer generator operative to offer the temporary working value in response to the maximum bitrate request if the temporary working value is a network element supported value, offer a highest network element supported value in response to the maximum bitrate request if the temporary working value is above all network element supported values, offer a lowest supported value in response to the maximum bitrate request if the temporary working value is below all network element supported values, offer a next higher network element supported value if the temporary working value is between the next higher and a next lower network element supported value and the next higher network element supported value is less than or equal to the maximum bitrate limit; and offer the next lower network element supported value if the temporary working value is between the next higher and the next lower network element supported value and the next higher network element supported value is greater than the maximum bitrate limit.
27. (Original) The network element of claim 26 wherein the network element comprises an SGSN.
28. (Original) The network element of claim 26 wherein the network element comprises a GGSN.
29. (Original) The network element of claim 26 wherein the network element comprises an RNC.

*Reasons for Allowance*

2. Claims 1-24 and 26-29 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 1, 6, 16, 17 and 26, the prior art of record does not, either alone or in combination, teach each and every limitation. Particularly, the prior art fails to teach that in response to offering to provide requested communication services, the offered maximum bitrate is determined to be a bit rate that is equal to a value of a member of an allowable subset of a set of available maximum bitrate values. All prior art has a set of available bitrate values, but does not further define subsets of the set of available bitrate values.

Toskala et al. (US 2003/0232624) teaches that communication between a UE and a NodeB/RNC negotiate a maximum bitrate value that is supported by both UE and the NodeB/RNC, where the maximum bitrate value used is determined based on the capabilities of both elements. However, Toskala does not teach that the requested value may be between two acceptable maximum bitrate values that the NodeB/RNC support, as is claimed in the independent claims 1, 6, 16, 17, and 26 (i.e., a subset of the set of available maximum bitrate values).

Other prior art of record teach similar aspects of the invention as Toskala, where the rate that is requested by the UE to the NodeB/RNC is from a predefined list of values broadcasted to the UE, not within a subset of the set of maximum available bitrate values. Therefore, the independent claims 1, 6, 16, 17 and 26 are allowable over prior art of record.

Regarding the allowability of the claims with respect to 35 USC 101, the claims are allowable. In particular, the method claims 1-16 are allowable over 35 USC 101 because the claims are directed to a method that is performed for a network element to respond to a request,

therefore the network element must perform these steps in order to perform the act of responding to the maximum bitrate request of the user equipment of the subscriber.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis A. Alia whose telephone number is (571) 270-3116. The examiner can normally be reached on Monday through Friday, 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/  
Supervisory Patent Examiner, Art Unit 2416

/Curtis A Alia/  
Examiner, Art Unit 2416  
3/9/2009

CAA